The MAC Flyer

NOVEMBER 1976

THUNDERSTORMS KILL .. Page 16.

MILITARY AIRLIFT COMMAND

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For Greater Efficiency
in MAC Air Operations

The MAC Flyer

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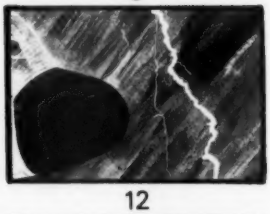

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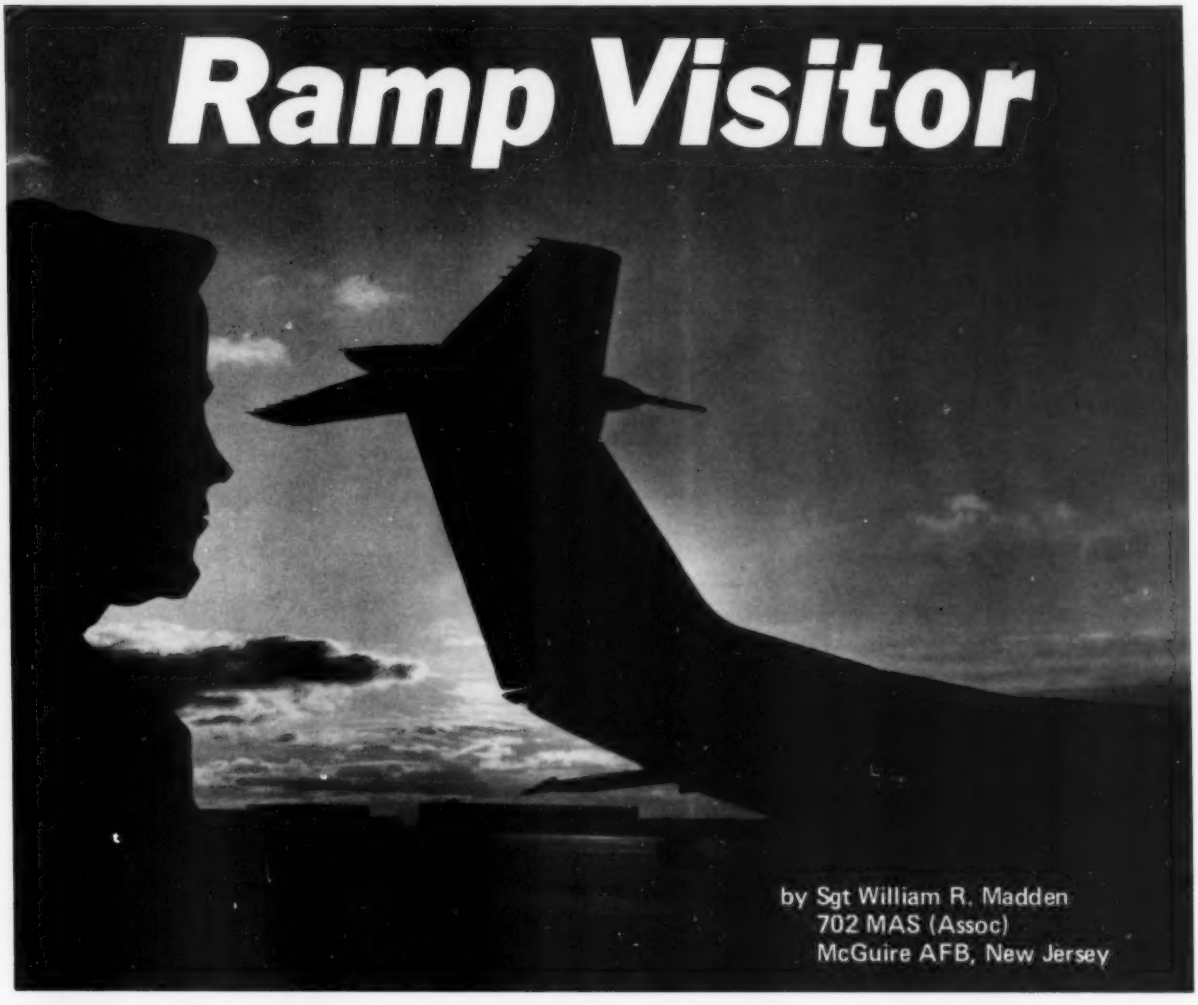
In the airlift squadrons' building at Charleston Air Force Base hangs a portrait of Technical Sergeant Paul J. Yonkie. The building also carries his name. Sergeant Yonkie was a flight engineer in the 76 MAS when he lost his life in Southeast Asia during a terrorist attack. That tragedy was long ago and far away. This story is for here and now. Lest we forget.

Ramp Visitor



by Sgt William R. Madden
702 MAS (Assoc)
McGuire AFB, New Jersey

The visitor had penetrated the base perimeter during the night, while heavy fog shrouded the area. The barbed wire had been only a nuisance; he had made the trek with only slight scratches and lacerations on his face and hands. His assistant had been helpful, but was no longer needed and had long since returned to headquarters. Now alone, the visitor lay in growths of stunted laurel and ragweed, near the taxiway that led from the parking ramp to the runway. He was soaked through, despite the two layers of clothing he wore: an outer camouflage coverall and, underneath, a regulation SP duty uniform.

He shivered. There were no dry spots to shift to; the wetness was everywhere, on every leaf. He endured the dampness and the waiting. At last, with the first paleness of dawn, the touch of a westward breeze lifted his spirits. The breeze would carry away the fog; the forecast had been accurate.

In his discomfort it was difficult to maintain the pre-

cise state of mind so necessary for this stage of operations. He forced himself to murmur the goals of the Sunstrike Alliance: "To destroy the ruling criminals with the sword of fire, in revenge for the oppressed who dare not rise and join us . . . To achieve a tactical position through brave acts such as elimination of military criminals and hardware . . . "

Tactical position! Timing! Yes, the timing must be perfect. There would be phone calls one minute after the blast, to claim credit. It had to occur precisely as planned.

Insects and birds began their dawn flutterings among the weeds and cattails as the man's field of vision grew.

"To overthrow violently the Constitutional government . . .

With a vague feeling of kinship he observed a snake gliding through the underbrush in search of eggs. A few minutes later the cries of the blackbirds spoke of the snake's success. Wryly, the man compared himself with the snake. As if to bolster his confidence, he fondled the container of explosive and then the detonator in his pocket. He would succeed. Tonight there would be celebration, and he smiled.

The air base unfolded before him. His target, the heavy jet, sat silently, isolated from the other aircraft and closer to him than the rest. He would wait until all the personnel came out to see where they parked the vehicles. A thin layer of fog still hung a few feet above the ground. It would help. It would be perfect.

He slapped at a mosquito on his face as the sun shot its first yellow rays across the open spaces that he would soon have to cross. Time was growing short now. Would his months of covert watchfulness pay off? If so, the Alliance would grow and thrive.

It really had not been that difficult to obtain the things he needed. Get a haircut, steal an I.D. card—yes, even a security badge. The Alliance had commended him for that. Then listen and learn—at the cafeteria, at the clubs, wherever there were gatherings. Study the discarded manuals, learn the moments of laxness of security, the moments of greatest fatigue, the times of greatest confusion. He had done his research well.

He studied the faraway ramp. A crew bus trundled toward the droop-winged airplane, and the visitor crawled forward. He wondered how Groups II and III were handling their assignments at the other bases.

•

Sergeant Bray clambered down from the crew bus and took note of the tail number of the aircraft. This was the airplane; now to get to work. They had only an hour. B-4 bags and crewmembers spilled onto the ramp and the bus drove off. The preflight inspection began.

Bray took his student loadmaster in tow and conducted the outside walkaround. The C-141 was almost dry of dew in the warmth of the sun's rays. A slight breeze blew comfortably across the ramp and Bray sucked it in. He smelled the promise of a beautiful summer day, but he would be leaving it behind for awhile. On with the checklist, he ordered himself.

As they continued the preflight, the cargo load arrived. He supervised his student in determining the loading sequence. There were nine pallets, including some "hot stuff."

"C'mon, we'll come back to this in a minute," he said to the student. He entered the cockpit, brushing against a student engineer as he did so. So many unfamiliar faces! The cockpit became a hectic area. He hurried through his duties there and directed his student to summon the crew chief.

As he waited, the instructor glanced around the flight deck. Even with all the new faces, the system still seemed to work—only rarely had they gotten behind the schedule. He studied the new engineer—no, there were two of them, plus an instructor. I'll have to get their names later, he thought; I should have done it on the bus. They were too busy now.

The crew chief made his way to the flight deck and introduced himself. He spoke through deep gulps of air as if he had been running. Bray pointed out a few minor writeups. Could he take care of them? And again he turned his attention to his student.

"C'mon, we've got 45 minutes to load and complete the form F. You go ahead and inventory; I'll supervise the loading. Hurry up, now."

The loading crew consisted of five airmen, some of whom Bray had not seen before. As they onloaded the cargo, Bray gazed out from time to time across the tranquil ramp and taxiways. The blue taxi lights had been extinguished earlier. Beyond them, well above the horizon, was the sun, into which he would soon be flying . . . Was that an SP picking up litter out there? Could be. After all, Foreign Object Damage is everybody's business. Good idea. Maybe the guy screwed up and he's getting some extra training. Damn good idea.

Bray supervised the locking of the seventh pallet. A fine loading crew, very fast but thorough, he mused. We'll be finished in nothing flat. As he bent to inspect the locks on the eighth pallet he was tapped on the shoulder from behind.

"Restricted Area Badge, please, Sergeant," said the SP.

"Sure," answered Bray. He wished they would do this on the crew bus but, after all, he *should* be wearing it. Pain in the neck to interrupt your work and have to fish around for that badge. He removed his tight-fitting gloves with a struggle, found the badge in a shoulder pocket, and displayed it to the young security policeman.

"No offense," offered Bray, "but if there's two of you why did it take so long for you to check badges? We've been here half an hour!"

"My partner has to stay in the truck, on the radio, and most of you guys don't wear your badges. It'd be a lot easier for us if you'd get in the habit. When you get involved with checklists and stuff, it gets to be a hassle. So it takes a bit longer—but, we have to do it."

"Your partner is in the truck? Okay, if you say so. But who's that moonlighting out there for the sanitation crew?" Bray jerked his thumb in the direction of the SP he had seen.

"My partner is in the truck," repeated the SP, shrugging his shoulders. He was accustomed to the impatience of flight crews and did not find it objectionable. "Have a nice flight, Sergeant." He turned to go.

"Then who *is* that?" demanded Bray. Both men stepped to the troop door and observed the distant SP. Bray saw that he was at least two hundred yards closer than before. Suddenly the man broke into a dead run directly toward the aircraft. The SP jumped down onto the ramp and ran head-on to intercept him.

"He's carrying something!" he shouted to Bray. "I'll take him! Get on the horn!"

The security policeman closed the gap. Bray reached the P.A. system. "Everybody clear the aircraft!" he bellowed and jumped to the concrete. Racing, running toward the parked security police truck—then the blast from behind, and he was thrown, tumbling along the concrete.

As his head struck, everything blurred for a moment. Later he would remember raising himself up on his elbows and looking back to where the SP had intercepted the running man. There was no one. Then the area became crowded with flashing red lights and people, and he allowed his face to rest on the cool concrete.

•

Waiting, still in darkness, the insurgent of Group II slapped away the mosquitoes for the thousandth time and repeated the litany of hatred. He wore green camouflage coveralls over an Air Force flight suit and carried three pipe bombs. He waited until the silhouette of the landing Starlifter blended into the runway lights and he heard the thunder of reverse thrust; he moved forward. "The division has occurred. We will now conquer. We will overthrow with violence . . . "

ABOUT THE AUTHOR

Sergeant Madden is an Air Force Reservist with the 702 MAS at McGuire AFB, New Jersey. He is a loadmaster on the C-141. Sergeant Madden began his Air Force career in 1956 as a radar operator. He is a graduate of Fairleigh Dickinson University in Madison, New Jersey, holds a FAA commercial pilots rating, and is a devout cyclist – having once ridden a ten-speed bike from New Jersey to San Diego in 30 days.

Mishaps with a Moral

There are a couple of schools of thought concerning the effects of ice on your favorite libation — but when it comes to airframes and powerplants the opinion is unanimous.

Ice Strikes Twice

The master caution light pulled his eyes into the cockpit. And then the flashing ICING light. He turned to his left, scanning the left wing. The waning twilight which penetrated the thick clouds didn't help much; he turned on the leading edge lights and looked again. "How's it look on your side, Stu?"

"Hard to tell," the copilot replied. "Looks like we're picking up some on the engines; I'm not sure about the wing."

"Okay," the AC decided, "we'll use engine anti-ice and keep an eye on the wings, just in case." He moved four switches; four lights glowed green in the gloom of the cockpit. The engulfing clouds reflected the glare of the leading edge lights, so he switched them off and turned his attention back to the approach briefing. There was no further mention of ice during the descent; no one bothered to look out the side windows again.

Sound familiar? If so, maybe you've been ignoring a very real hazard. Most of us spend so little time in icing conditions that we tend to regard icing as no more than a nuisance and the proper use of anti-ice equipment as a waste of time. After a thousand hours of ignoring the dire warnings in the Dash One without suffering any serious consequences, we relegate icing problems to the same category as lost comm in a six-radio airplane.

But every year, icing takes its toll of aircraft and lives. The two accidents described below give clear warning of the tragic consequences which can result from flight through icing conditions.

T-39

The Sabreliner had landed at a military base short of destination for refueling. During the stopover, the pilot phoned his destination base, some 50 minutes away, to ask about the weather. He was advised that the local Air National Guard unit had cancelled its flight schedule for the remainder of the day due to low ceilings, icing conditions, and snow on the runway.

The official destination forecast was no more encouraging: intermittent periods of 800 feet obscured, one mile visibility, snow showers, and light to moderate icing from 1,500 to 10,000 feet. But the pilot elected to press on, in violation of his service directives—possibly prompted by the fact that his wife and the wife of another crewmember were waiting at destination.

The flight was handed off to approach control after a descent from 17,000 to 7,000 feet. The pilot requested a runway condition report and was informed that there were patches of snow on the runway, braking action was fair, and the ground temperature was 32° F. The pilot then requested a touch-and-go landing to check the braking action followed by a circling approach for a full stop.

Approach control cleared the flight for an ILS approach and gave the current weather as 600 feet overcast, visibility two and one-half miles with snow showers. After the pilot reported the outer marker inbound, the tower cleared him for a touch-and-go with a right turnout.

The touch-and-go was completed without incident; but on the turnout, the pilot informed the tower that he could not maintain contact with the field and requested another ILS approach. He received the requested clearance and advised the tower that he would attempt a full stop landing this time around. He further advised that, if the braking action was not good enough, he intended to make a touch-and-go and would like clearance to his alternate.

Witnesses observed the aircraft as it touched down about 1,000 feet from the approach end of the runway. It rolled for 2,500 to 3,000 feet in a normal three-point attitude; no unusual yawing motion or directional control difficulties were noticed, but neither was any appreciable deceleration. The aircraft was then observed to rotate and lift off the runway. It climbed to an altitude of 100 to 150 feet, where it appeared to be extremely slow with a higher than normal pitch attitude. The nose was lowered slightly, with no apparent increase in airspeed. For a short time, the aircraft proceeded in level flight with wing rock and yaw; it then slowly rolled to the right about 270 degrees and slammed into the ground in approximately a 60-degree dive. The aircraft was destroyed and all aboard were fatally injured.

Physical evidence at the crash site, engineering investigation of aircraft components, and witnesses' statements gave no indication of aircraft malfunction. But statements from other aircrews airborne at the time indicated light to moderate icing around the airfield area. Investigators concluded that the aircraft had become covered with structural ice, probably unnoticed by the pilot, and that the apparent ice buildup had caused a higher than normal stall speed, unfamiliar flight characteristics, and the subsequent departure from controlled flight. The fact that full left aileron trim and six degrees of left rudder trim had been set prior to impact suggested that some unusual flight condition—probably wing ice—had been encountered during the two approaches.

Adapted from *Approach*

H-53

The predeparture weather briefing called for en route temperatures of 8°C at 6,000 feet, minimum ceilings of 200 feet and minimum visibility of two miles. The minimum freezing level was forecast to be 12,000 feet, lowering to 9,000 feet much later in the day. Light to moderate precipitation en route was forecast, with no icing.

Unknown to the crew, a cold frontal passage occurred while the aircraft was on the ground at its first stop. The temperature at en route altitude now ranged from +5 to -2°C, with high humidity and IMC prevailing.

Approximately an hour after departing the en route stop, the big helicopter received a descent clearance to 5,000 feet and then clearance to maintain VFR with descent as required. A short time later, witnesses observed the helicopter at approximately 3,000 feet AGL; it was making unusual noises, and the main rotor blades were coning upwards. The rotor system failed, and the aircraft crashed in a near vertical descent.

Frontal passage occurred while the crew was on the ground.

Induction ice was judged to have caused catastrophic failure of both engines. After flying for an extended period in conditions favorable for formation of induction ice (i.e., high humidity and temperatures near freezing), the helicopter descended into warmer air, where the ice separated and was ingested into the engines. The nearly instantaneous power loss caused a decay in rotor rpm too rapid for the crew to cope with, and the subsequent blade stall and upward coning of the blades brought on the main rotor system failure.

Think Again

Two aircraft and numerous lives lost—all because of a little frozen water. If you still think of ice as nothing more than a minor annoyance, or something you use to ruin a martini, you haven't been listening.

On the other hand, maybe the message in these two tragedies is clear to you. If so, now would be a good time to review your Dash One procedures for flying in icing conditions, to recheck your aircraft's limitations, and to remember that an anti-icing system is designed to *prevent* ice, not to remove it.

No aircraft is immune to the effects of in-flight icing. So if you can't prevent it, avoid it; and if you can't avoid it, stay on the ground until you can. You may have a late arrival back home, but that's a whole lot better than an early arrival at an icy grave.

Sub-Zero Defects

Novemb-r-r-r, already. TMF's consulting meteorologist predicts snow sometime after the elections. (TMF's consulting political scientist predicted snow before the elections.) And unless you're an ex-editor of the FLYER stationed in Australia (curse you, George), in the next few months you'll experience the snow, winds, ice, rain, and other associated nastiness of winter.

So for those of us relegated to life in the Northern Hemisphere, it's time to break out the woolies, arctic gear, and mukluks, and refamiliarize ourselves with cold weather and its effects on the bird and the bod.

—the bird and the body.

We've assembled some stories, based on fact, about winter's effect on aircraft and people. Then, there is *verse* about what a tiger the T-39 gets to be in winter—but the ode applies to all you throttle benders. Twenty-eight wheelers, included. Finally, we've got the latest on PFC (and that's not private first class, Virginia) and pilot technique to get you stopped *on* the runway, even with the slush and rain that winter brings.

The Bird, or
How to Ground Loop a Starlifter

When we think of snowy runways and control problems, the mind's eye gets a bit astigmatic. We see T-39's slipping and sliding sans reverse thrust and antiskid or a C-130 whose Hamilton Standards randomly select "pitch lock" so the aircraft commander can practice his sidewinder taxi. But winds and slick surfaces have no effect on the real heavies, right? Wrong! This story actually occurred—and C.R. Terror was not at the controls.

The 141 was on a routine mission to a northern European base. Winter. Snow and ice. The arrival had presented no problems, nor had the off- and on-loading. With the crew snug inside the warm Starlifter, the AC taxied the big bird toward the active.

"Okay, troops," the AC might have said, "this'll be a rolling takeoff. Tell tower we're ready."

About halfway through the right turn for runway lineup, the pilot advanced power, and the Starlifter went into a classic ten-wheel drift. Frantically, the pilot spun the nose gear steering knob and applied more power. This only aggravated directional control and the 141 did a couple of quick compass swings. The merry-go-round stopped after two revolutions, and the crew noticed that they were almost clear of the active.

"Let's do a 720 and get the hell out of here!"

It's time to start thinking about anti-freeze for the Mercedes, Pinto, or whatever. And while you're pouring that liquid gold into the radiator of your favorite racing car, give a little thought to protecting your airframe and personal frame from the elusive, pervasive Jack Frost.

"Let's deplane the scanner," the AC directed. The crew entrance door opened and one scanner, with flashlight, emerged.

"Don't see any damage, Sir," the scanner announced. "Well, we did take out a couple of runway lights—but the bird looks alpha one."

"Good," the AC responded. "Get on board and we'll head south."

He did and they did. There's a lot more to this tale but that concludes Winter's part in the scenario.

The Body, or
Fifty Below Zero Is Cold

The aircraft was a backup for an operational reconnaissance support mission. When the crew found that the primary bird had serious maintenance problems, the decision was made to swap to the backup. The temperature was near minus 50° F. Maintenance problems on the backup further extended the delay—and there were no ground heaters available to warm the cockpit—and since the APU was inop, very little heat was available on taxi out.

Shortly after takeoff, the pilot advised the ground agency that he was experiencing a problem getting the gear up. At about 300 to 400 feet the pilot leveled the big jet and the crew began troubleshooting the stubborn gear.

Distracted by other cockpit problems, the crew didn't notice the diminishing airspeed. As the aircraft began to shudder, the pilot realized that the gear was only a minor problem; he rolled the wings level and added power. He was too low, well behind the power curve, and even a last attempt to reduce drag by raising the flaps proved futile. The swept-wing mushed into the ground and burst into flames. All hands were killed.

Everything here points to crew error. Well, almost everything. The nagging question in the minds of investigators and Monday mourning quarterbacks is: Just how much "cold soaking" can the human body take and still be expected to respond to simple visual and aural cues?

The board recommended that a study be conducted to determine the effects on crews of extended exposure to extreme cold and that definitive rules be established for flight crew ground operations in extreme cold.

Perhaps Robert W. Service described the cold and its effects best in his poem, "The Cremation of Sam McGee." Describing a trek across northern Alaska in search for gold, he used these words:

"On Christmas Day, we were mushing our way,
Over the Dawson Trail.

Talk of cold! Through the parka's fold
It stabbed like a driven nail.

If our eyes we closed, then the lashes froze,
Till sometimes we couldn't see;
It wasn't much fun . . ."

•

Sub-Zero

Winter brings out the beast in the Sabreliner.

The T-39 can truly get to be a lion in winter. Its braking system is one that requires constant attention and this is particularly true when icy or patchy conditions may be encountered. Be aware of the possibility of locked brakes and the proper techniques to prevent them.

The Sabre in Winter

by 1Lt Theodore C. Joerding
Det 4, 1401 MAS
Peterson Field, Colorado

It's getting to be that time of year
When the cross-winds begin to blow
Go to your chart and then subtract five
To determine if it's okay to go.

Our sweet little bird is changing her ways
And all those who fly her, beware!
Get into your regs for you'll find that it pays
'Cause in winter the Sabre grows hair.

That runway down there is no place to land
If it carries four inches of snow.
With an inch of slush or a nine RCR
See your regs, they say where to go.

A wet, slippery runway can cause you some pain;
One that's frozen will bring you more trouble.
Your ground roll goes up by half in the rain
But on ice it can increase to double.

So keep this in mind when the temp starts to fall:
Be safe and you're one jump ahead.
To land when it's icy may show you have gall
But doesn't help much when you're dead!

We've discussed the Bird and the Body and the Sabreliner vis-a-vis winter. But there's something new on the horizon designed to give pilots a helping hand just when he's got a handful of airplane. It's called PFC, and it gets to be really important on those winter days that bring rain instead of snow.

What the hell is PFC, anyway?

What Every Pilot Should Know About PFC*

by Capt Richard E. Simmons
375 AAW, Scott AFB, Illinois

**Porous friction course . . . a new runway surface treatment that improves traction under slippery conditions but may blow your day if not treated with the respect it deserves.*

In spite of efforts by aircraft, airport, and tire designers to create a foolproof wet/slippery runway stopping system, the pilot's old nemesis, hydroplaning, persists today. The scenario goes like this: The aircraft touches down above hydroplaning speed . . . because water is too deep for the tread to squeeze it out, hydroplaning begins . . . wheels don't spin up . . . antiskid due either to design, malfunction, or nonexistence fails to release hastily applied brake pressure . . . hydroplaning/skidding continues until tires(s) fail . . . directional control is lost . . . aircraft departs the runway . . . fuel tanks rupture . . . fire breaks out . . . etc, etc.

One foolproof way to break this vicious cycle would be to prevent sufficient buildup of water on the runway to cause hydroplaning. Early attempts at attacking this problem led to runway grooving. While effective, grooving does not lend itself to

all runway surfaces, so engineering wizards got together and developed the Porous Friction Course (PFC) surface treatment as an alternative. To date, four military bases in the CONUS (Pease, Hill, Scott, and Dallas NAS), several civilian fields, and some bases in Europe have opted for PFC and indications are its use will spread.

Unfortunately, however, PFC is not a panacea for landing problems. In fact, if its characteristics are not understood and treated with the respect they deserve, it could ruin your whole day.

What then is this thing call PFC? It is simply a special asphaltic pavement. In a "typical" asphaltic concrete, the aggregate consists of a gradation of rock from large pebbles down to the size of sand. When it's mixed together with an asphalt binder, the result is a dense, close-knit surface such as you see on highways. With PFC, however, the aggregate is all of uniform gradation consisting of about 3/8 inch rock. The aggregate, specially chosen because it's very hard and angular, is mixed with asphalt until each piece is barely coated. It is then rolled on the surface like conventional asphaltic concrete. The result is a very open, sponge-like texture, which allows water to filter down from the surface and off the runway. It is so effective that the friction coefficient of a wet PFC runway is almost as high as for dry asphalt or concrete runway.

PFC is anything but smooth.

Since the type of aggregate used creates a very abrasive surface, in order to prevent excessive tire wear, the touchdown zone will not have PFC overlay; the coating starts about 1,000 to 1,500 feet from the threshold. And although the PFC solves the hydroplaning problem, it creates some new problems for the pilot.

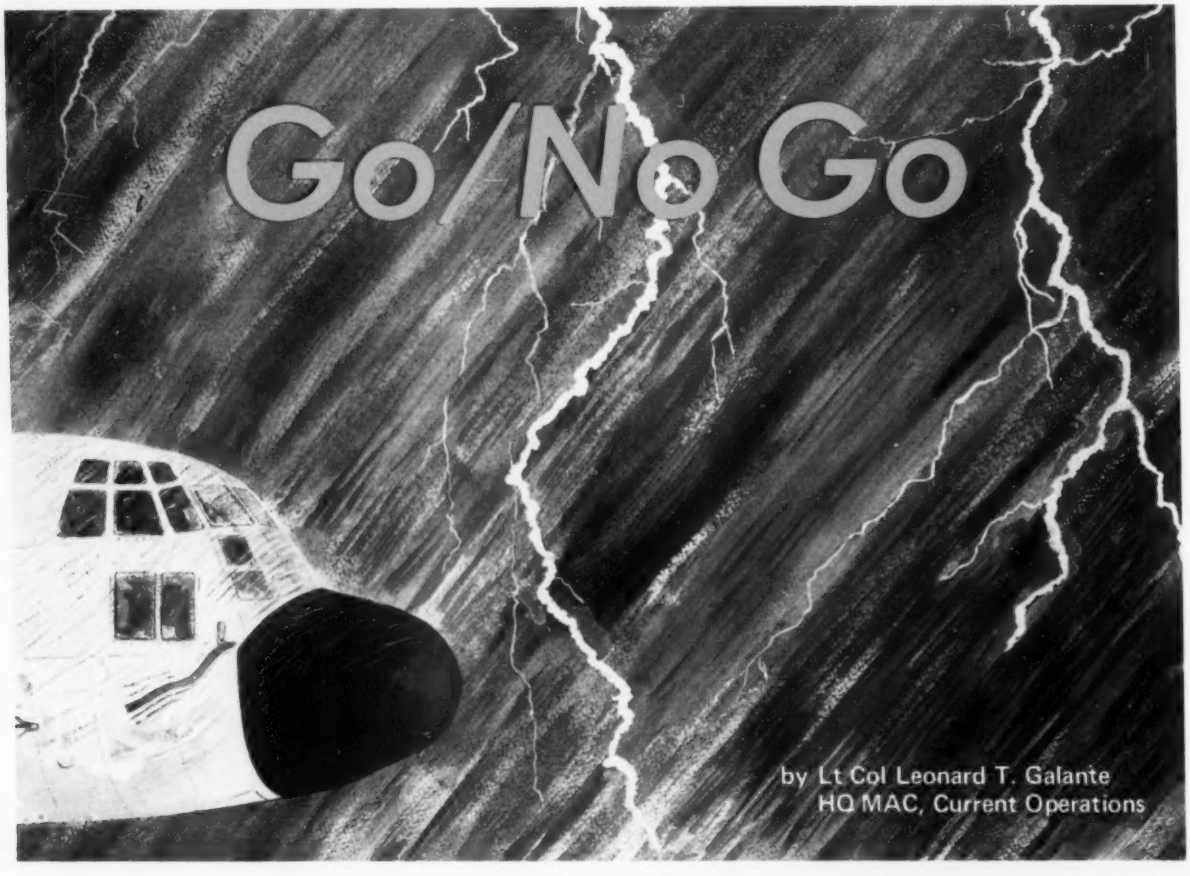
First, when you're landing on a wet or slippery PFC runway, keep a couple of things in mind. One, don't get on the brakes until you're on the PFC. Otherwise, you're likely to hydroplane, lock a wheel and, when you hit the PFC, skid and fail the tires. Two, plan to take full advantage of the good braking you'll get on the PFC. That is, plan your braking so as to depart the PFC (1,000 to 1,500 feet remaining) at no more than a safe taxi speed. Of course, that's not really new advice; for years we've been advising pilots to expect poor braking action in the last 1,000 to 2,000 feet due to buildup of rubber. The difference here is one of degree.

The second area of concern involves landing on a dry PFC runway—next summer when the temperatures exceed about 85°F. High runway temperatures make the asphalt which coats the surface aggregate less viscous and, with the added frictional heating of an aircraft tire, it may become nearly liquid. Therefore, the coefficient of friction of a dry PFC runway on a hot day may actually be lower than most runway surfaces, making it easier to lock a wheel. Once lockup occurs, because of the abrasive nature of the PFC surface, tires deteriorate rapidly and failure is nearly assured. Of course, the locked wheel condition is no problem for the pilot with antiskid on his side but, for those who don't have it or for those whose antiskid malfunctions (and that's all of us), braking techniques can mean the difference between an "attaboy" and "gotcha" arrival.

So it seems that once again technology has pulled the old "good news-bad news" trick on pilots. Too much braking on the PFC can blow a tire, but failure to stop on it can mean sliding off the end. The solution is, however, simple and obvious. Plan your approach to touch down on speed and no more than 1,000 to 1,500 feet down the runway. Avoiding a long, hot touchdown is good advice for any landing, but it is vital on a PFC runway.

In summary, PFC is an invaluable aid for landing on a wet or slippery runway—that's when it's at its best. At its worst—when it's hot and dry—treat it with the respect it deserves lest you blow it, blow out, blow up . . .

By now the "statute of limitations" has run out, so I can tell the story. I've changed the names, but everything else is accurate to the best of my recollection.



by Lt Col Leonard T. Galante
HQ MAC, Current Operations

You have the "duty" again and it's just past midnight. The duty is sometimes boring, sometimes interesting, sometimes frightening; but it's always 24 hours long.

Oh, well, you think, I get relieved at 0800. It's a quiet night so I'll rack out for a while. Boy, I sure wish I didn't have to pull RCC duty twice a month. I'm here to fly, but every officer in the squadron has to do it. Maybe someday we'll have real controllers stationed here. That would be great, they have the training and it would be their primary duty and then . . .

Suddenly, the teletype starts its insistent rhythmic chatter:

FM: COMEASTAREA
TO: COMUSFORAZ
C141, MAC 13601,
ENROUTE KWRI TO LETO
SHUTDOWN #4 ENG, SUSPECTED FIRE. ETA LETO
0245Z, FL 350, TAS 410,
POSITION 0115Z, 44N 19W.
NO EMERGENCY DECLARED. WILL ADVISE.
BT

You scan the message and take a quick look at the plotting board. As you suspected, even with a rapid scramble and MAX TIT, your HC-130 would still be 200 miles behind him when he was on final approach. No sweat. Besides, he didn't request intercept; remember, 55-1 says over two hours from a suitable landing field, AC will request intercept—

Your thoughts are interrupted by the telephone's ring.

"Rescue, Captain Tate."

"Captain, this is Colonel Black, Twenty-First Command Post."

"Yes, Sir?"

"We have a C-141, MAC 13601, with an engine out. I want you to scramble your alert bird for intercept."

"Yes, Sir, but I just ran some computations and we'd be 200 miles behind him when he gets to Torrejon."

"Yeah, I suspected that. That's why we asked Moron to launch their alert bird too. We want you airborne because of the nature of that 141's cargo. He won't be able to jettison it and if anything else happens we have to know exactly where he goes down."

"Yes, Sir, understand. We'll launch immediately."

You run the scramble checklist and notify the crew. Within ten minutes, the AC and navigator are standing in front of you. Briefly you tell them what's up. You can see the nav doing the mental calculations which tell him he won't intercept the C-141. As he starts to object, you raise a hand.

"Look, Steve—I know you won't intercept him, but he must have some pretty important stuff on board. That colonel at Twenty-first meant business. Besides, he may have to divert, or something else. It's our mission, so let's get going!"

"Okay, Paul," the AC interjects, "we'll pour on the coal and get as close as possible."

You watch them run out; in a matter of minutes you hear the turboprops spinning up. It's an ugly night—pitch black, wind and rain—the usual island crud. But you can hear them taxi out and shortly they're rolling down the runway.

Boy, that Herky's howling longer and louder than usual, you think. Jack must really be cobbin' the throttles. Sure is a great airplane; beats that old HC-54 we had last year. It's a shame MAC got the C-141 so quick. Just when Rescue gets a fast airplane, they switch to C-141's . . . oh, well . . .

The Tower Hotline rings and you reach for the receiver: "Air Force Rescue 50972 airborne 0148."

"Roger," you answer; and as you hang up, you think, not bad, just 23 minutes after I made the first call. Ah, yes, a routine rapid Rescue response.

You set about putting your log book in order, pour another cup of coffee and sit back to relax. The crew's got it now and it's just a simple intercept. You yawn . . . stretch . . . and the waiting begins.

Less than an hour later, the telephone interrupts your reading of C.R. Terror's latest exploits.

"Captain Tate, this is Colonel Black again. That C-141's in contact with the Moron HC-130 and he's over land. Thanks for your help; we've already passed the recall to your bird."

Stifling a yawn, you thank the Colonel, hang up, and make the proper entry in your log. You glance at your watch and call Airways for 972's ETA.

"ETA: 0340Z. He requests for you to come up on Company in 20 minutes."

Hmm, you muse, he must want to thank me for the night instrument time.

Twenty minutes later you're talking to the AC and he's not in a joking mood. He's really concerned.

"Paul, this is Jack."

"Read you, over."

"We've got a problem. We have *no* airspeed indications. Repeat *no* airspeed."

"Roger, when did it happen?"

"We lost it at takeoff. Look, I don't want to go into details, but have the ops officer come down."

"Wilco. Jack, I checked weather and the field will be out of limits in about two hours—just about sunrise. Are you declaring an emergency?"

"Affirm. The weather doesn't look good anywhere else so I guess we'll have to bring it home."

You wake up the boss and brief him on the problem—including the weather. Within minutes, he's at your side and on the radio, talking with the AC.

"Nine Seven Two, this is

Rescue Two."

"Roger, Sir, our airspeed is out. It appears the pitot covers are still on the tubes. We've used pitot heat since departure and tried to burn them off. It doesn't work. We're assuming the weather's too bad to launch an escort. We'd like to attempt a landing using the doppler."

"Say again—the doppler?"

"Affirm. The navigator will monitor ground speed and drift. We'll have Tower give us the winds every two minutes down GCA final and Steve will convert them to airspeed. It should be fairly accurate and I think it will work. I'll back up GCA with the ILS so direction shouldn't be a problem."

"Okay, Jack," the ops officer sighs, "give it a go. But make a few practice approaches before you land. The 0400 weather is 1,000 overcast, viz two miles with rain showers, wind 330 at 25, gusts to 30. Slight crosswind, so watch it close. Do you have any other problems?"

"Negative, Sir. The bird's Alpha One."

Again the waiting begins. You and the ops officer try to chat, but it's a little forced. Your thoughts are with the crew. You wonder how things like this happen. Jack's the squadron safety officer. Super conscientious, a good AC, careful and dependable. How? You think about Steve, the navigator, your contemporary in every way. Did he think of the doppler? Would you have thought of it? Greg, the copilot, almost ready for AC; "Goldie," the engineer, one of the best; and so on down the crew. All good, all pros . . . how could it happen? Oh, Lord . . . there they go on their first missed approach. You start as the UHF crackles—

"Rescue, 972. First approach looked good. I think it will work. We'll try one more and then land."

"Roger, 972. Anything else?"

"Affirm. Have the maintenance launch crew meet us in ops. I'll need some information from them for the incident report."

"Wilco. Good luck."

After another missed approach , 50972 makes a successful and uneventful landing. Postflight inspection reveals the pitot covers in place and only slightly charred by the pitot heat. A complete on-the-spot investigation and conference is held among the crew, the maintenance launch team, and the ops officer. Because you've got the duty you become the recorder. You scribble on a note pad:

What happened?

Aircraft flew with pitot covers in place. Recovered safely by using the doppler system.

Contributing factors?

"Cocking" the aircraft for alert. Wind, rain, and darkness. Partial airspeed indications up to the "Go—No Go" point.

Why did it happen?

A young airman, on the maintenance launch team, was experiencing his first scramble. Wind, rain, and excitement caused him to misinterpret the crew chief's direction to pull the pitot covers. The "cocking" checklist required the engineer to get into the seat for engine start without checking pins and pitot covers. These were to be pulled and placed aboard by the maintenance team. The AC declared that during takeoff his airspeed indicator froze at 70 knots. Copilot stated his was operating normally and takeoff continued. Copilot's airspeed froze at approximately 110 knots, but aircraft was passing 7,000-foot marker at this time. Wind and rain may have caused severe hydroplaning if AC had tried to abort. He elected to take off.

You sit there listening as the facts come out one by one. You're impressed with the honesty of all involved and you wonder what will result. You aren't entirely blameless; after all, you did push that crew just a little, didn't you? Was that why Jack didn't abort? So you learn it's just as important to do it safe as to do it fast. You also learn something about crew coordination.

Your relief arrives and a new day begins. Why not go to the club for steak and eggs?

Author's note: This story is based on an incident that occurred some ten years ago. Hopefully this fictional account would not occur today—the old "cocking" checklist has been deleted and replaced by a more comprehensive procedure.

Global Notes

Gentlemen, Start Your Engines

An unattended transient alert vehicle began to roll across the parking ramp at a foreign base. It was on a collision course with a C-141 being directed into a parking spot. A group of TDY maintenance technicians waiting to service the arriving aircraft noticed the vehicle but assumed that it was backing up to load on some nearby equipment. Suddenly A1C Kathleen M. Walsh, 438 OMS, and Sgt Mark E. Jones, 438 FMS, McGuire AFB, New Jersey, realized that the vehicle was driverless and ran to intercept it. Sergeant Jones managed to get inside and, with less than 15 feet to spare before collision with the operating number four engine, diverted the vehicle to a safe location. Sergeant Jones and Airman Walsh were recognized for their alertness and dedication to duty with the MAC Distinguished Individual Safety Award.

Runaway Huey

The UH-1P was on final approach and operating in emergency fuel control mode during a training mission when the engine rapidly accelerated to maximum limits. The IP, Captain Marion J. Messenger, Jr., ARRS/DOV, Scott AFB, Illinois, immediately assumed control of the aircraft and initiated control inputs to keep the engine and rotor rpm under control. There was no published emergency procedure that would correct the situation and, due to the extremely serious nature of the malfunction, Captain Messenger decided to shut down the engine. Realizing the possibility of encountering blade stall when the engine quit, he quickly lowered the collective upon the first indication of engine shut down and entered a successful autorotation. Captain Messenger was awarded the MAC Distinguished Individual Safety Award for his competent handling of the emergency.

Faulty Fuel Control

Following several normal approaches during a UH-1F routine training mission, the student pilot attempted a straight ahead practice autorotation to a power recovery. As he decreased the throttle, power turbine speed fell below desired rpm to 4,000 Nf. Observing that the student's attempts to increase speed with the throttle were unsuccessful, the instructor pilot, Maj Walter F. Turk, Det 3, 37 ARRS, Grand Forks AFB, North Dakota, took control of the helicopter, checking his throttle in the full open position. Quickly analyzing that the engine had lost power, Major Turk continued the autorotation through to touchdown without damage to the aircraft or injury to personnel. During a subsequent maintenance check, the engine would not accelerate beyond 4,000 Nf. The engine fuel control had failed internally. Maj Turk's analysis of the situation and his quick response earned for him the MAC Distinguished Individual Safety Award.

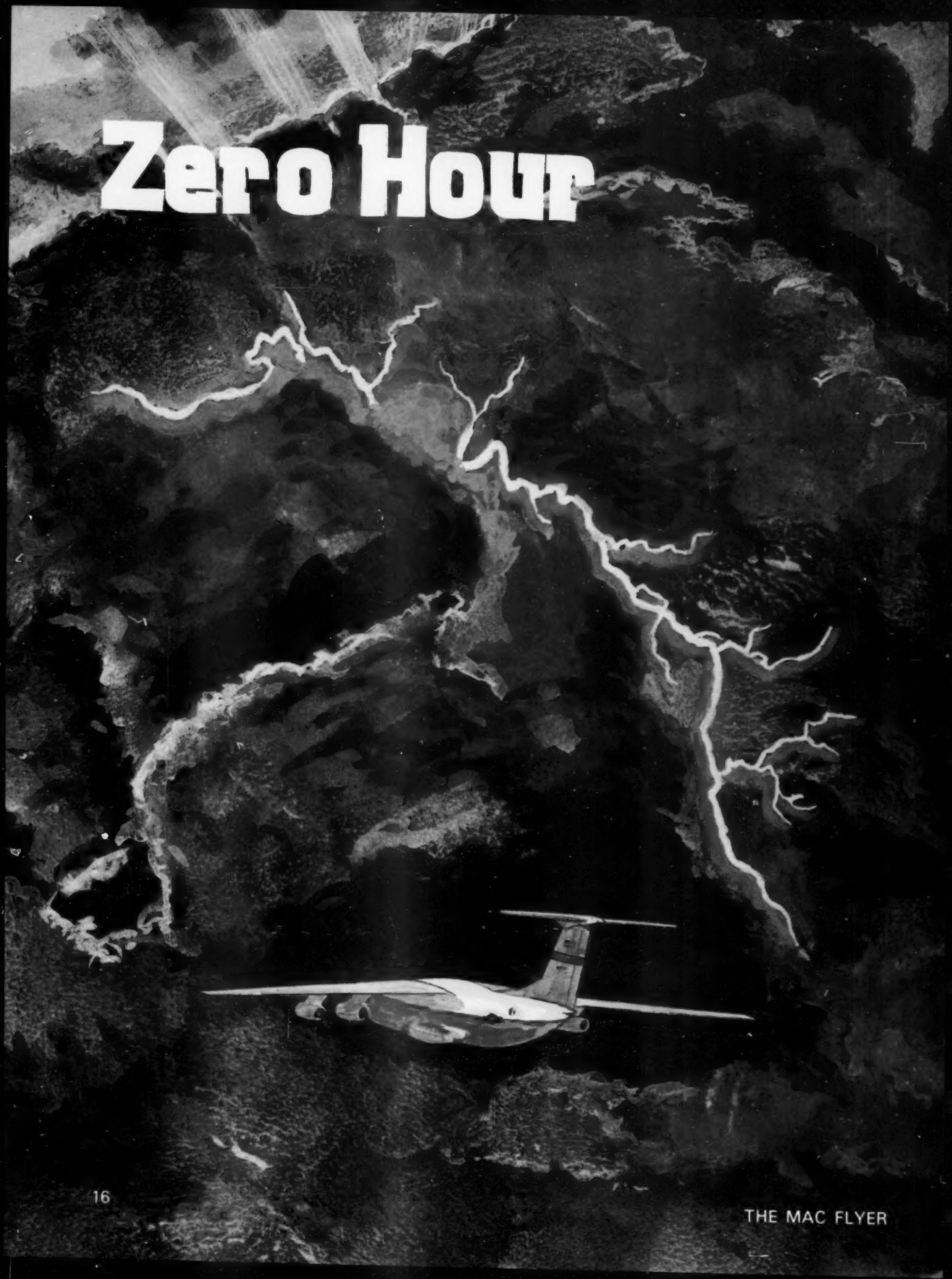
Watery Bed

A helicopter crew rescued a young woman who was adrift on an air mattress two miles from shore, several miles north of Kadena. After realizing she was being blown out to sea, she had tried very hard to paddle back, but the mattress had proved too big to handle.

The 33 ARRS, Kadena AB, Japan, was alerted and launched an H-3 to find and rescue the woman. The helicopter, commanded by Capt Bill Nelson, had little trouble finding the stranded woman. "I was really scared by then," the nonswimmer later said, "because the waves had turned me over three times. I was afraid I'd drown."

Sgt Wayne Cook, pararescue specialist, and SSgt Jack Mabry, flight mechanic, assisted in the operation that rescued the damsel in distress from her dubious cushion of safety.

Zero Hour



Honorable Mention, 1976 MAC Flying Safety Writing Contest

by Capt Derek L. Duke
300 MAS (Assoc)
Charleston AFB, South Carolina

For some of us who have flown inside a thunderstorm, the memory of the experience still bristles the hair. Others weren't so lucky. Captain Duke wrote this honorable mention story in March 1976. Any resemblance to actual accidents is purely coincidental.

MAC 54321, Center. Unable to approve deviation east. The overwater warning areas are hot."

Hawk did not answer. Hunched over the yoke, intent on the radar, he nervously twisted the control knobs trying to sharpen the returns on the scope. The fuzzy, indefinite returns lay directly ahead of his northbound C-141 and sat squarely between Norfolk and their destination, Dover.

Hawk grimaced. Just great, he thought. I didn't request a navigator this morning because the weather was forecast clear all day. Now, thunderstorms and I can't get this blasted radar tuned.

Alan watched him patiently.

The young copilot finally spoke up softly, "Hawk, it looks pretty bad out there. What are we gonna do?"

Hawk glanced across at Alan and then out at the towering squall line they were approching. Dark and threatening in the late afternoon sunlight, it seemed almost close enough to reach out and touch. "Well, we aren't going through there, that's for sure." Hawk gestured toward the thunderstorms.

Their gray-headed flight engineer, Sgt. Hobo Towns, interrupted in a cautious voice, "Sir, we're down to 15,000 pounds of fuel."

Damn, Hawk said to himself, here I am again pressing for God and country, and look where it's getting me. But what could you do? They need this plane badly with the big push on, so I take a crew duty extension to get home. Then they can't get me fuel, but the Marine forecaster says Dover's good enough to go with what we've got—minimum legal fuel. And that squall line dead ahead? "Well west of your route; no factor," was what the captain had said.

"MAC 54321, did you copy?"

Hawk quickly answered. "Roger, Center. Three twenty-one copies negative deviation to the east. How about to the west? We've gotta get around this stuff somehow."

"Roger, MAC, I vectored another C-141 at your altitude out west around the weather and into Dover about 15 minutes ago with no problems. For vectors, turn left to 300 degrees, maintain one-four thousand. I'll run you right through the same spot."

Hawk peered out to the west through the glaring sunlight toward a thick layer of cirrus. "Okay," he transmitted, "left to 300 and we're level one-four thousand. And be advised that our radar's not too pure."

"MAC 321, roger, and we're unable to turn the CP off due to high density traffic. But this route should be okay."

Hawk thumbed the autopilot turn knob and the Starlifter dipped its wing into a left bank. As he gradually steepened it up, Hawk looked out at the ground and watched the wingtip cut a path through the runways at Norfolk NAS. "Norfolk's clear and a million," Hawk must have said out loud.

Alan muttered, "Well, I hate Navy BOQ's anyway."

Hawk shot him a surprised glance. "This okay with you?" he asked.

"Yeah," Alan answered hesitantly. "It's just been an awful long day and we're all beat. Not a good time to be fooling around with weather like this."

"I'm not *fooling around,* Alan," Hawk said curtly. "I'm going to get this bird home because it's needed, and I plan to get it there in one piece."

Hawk quickly checked his watch: 2350Z, exactly. That extension expires in 10 minutes at 2400Z, he thought. Those yo-yo's, if they were gonna grant an extension, why only a half hour? They're playing the old "CYA" game.

They probably hadn't been legal on crew duty time when they finally took off from Cherry Point, Hawk thought to himself. Spent too much time figuring out whether to go. Just hope no one at Dover asks.

Hawk had been muttering aloud without realizing it. "Huh?" Alan asked, still thinking about the putdown his aircraft commander had just handed him.

"Nothing," Hawk said quietly, as he concentrated on the radar scope, still producing only a distorted, indefinite picture. "There's nothing out there—so the man says."

Hawk hated moments like this when he felt put on the spot. Bending the rules—yeah, this was one of those times, he thought. I'll just have to slip through and get this bird home.

The thick cirrus approached rapidly. "How about the continuous ignition and engine anti-ice?" Alan prodded.

Hawk reached up quickly to activate the switches, embarrassed. "It's on," he said. "And check airspeed at 230 knots for turbulence; everybody awake and strapped in."

Hawk relaxed a bit. He was thankful they had left all those Marine troops at Cherry Point. He hated to bounce passengers around, no matter what the reason.

The Starlifter shuddered as it sliced into the thick cirrus. The bumpiness increased immediately, and Hawk checked the autopilot, tightening his grip on the controls to help smooth out any inputs. Wow, he thought, this is a lot worse than I figured.

The cirrus was slowly changing to a denser, darker mass. Hawk had never really seen it like that before and it gave him a strange sensation, one he didn't like. A sudden wave of uncertainty shot through him: "turn around!" his subconscious cried.

He stole a glance at Alan and Hobo, both sitting there calmly. They didn't appear too concerned. What if I just turned around and diverted back to Norfolk? It's wide open. Would I have to explain why? What would I say?

Small flecks of ice clung to the windshield. Hawk craned around to look at the engines and wings. Yeah, a little ice accumulating, he thought. "Wing anti-ice on," he said calmly as he looked up to find the switches.

He saw it coming then, in a huge sheet aimed right at the cockpit. He instinctively whirled away, diving toward the side console.

The lightning struck with a deafening bang and a bursting flash. Stunned, Hawk didn't move. He realized he was alive and a wild banging jerked him stiffly upright. The last chunks of radome thumped away, and Hawk's heart sank, knowing he'd be busted to copilot for sure.

"Emergency power!" bellowed Alan.

Hawk realized then that red flags and unwinding instruments were everywhere. My God, he thought, we've lost all the generators. He lunged forward and activated the emergency power switch. His mind racing to catch up and clear his scrambled senses, Hawk grasped the yoke and throttles, taking physical control of the aircraft.

With no warning, the storm slammed the C-141 violently downward, pitching Hawk up-

ward with tremendous force, the restraining harness tearing painfully at his body. Viciously, he was driven back down into his seat as the dive abruptly bottomed. His vision momentarily went red.

Still hanging onto the controls, he felt pain shooting through his arm as it was knocked away from the throttles by the nav bag, which sent the throttles full forward. The firewalled engines screamed.

"Look out!" Alan screamed as he snatched back on the levers. Blood streamed from a gash in his forehead.

"Check your attitude indicator," Hawk shouted across to him. His own indicator rose unbelievably to 60 degrees nose up and 50 degrees right bank. With the aircraft lurching so wildly, Hawk had no idea what sort of correction he should attempt. He just hung on.

The ADI unwound to 30 degrees left bank. Then back suddenly to 20 up and 40 right as the aircraft continued to buck and jerk.

"Mayday, Mayday!" Hawk screamed into the radio. "MAC 321 in a thunderstorm, damaged, and out of control. Mayday, Mayday!"

Wild-eyed with terror, Hawk tried to peer out of the cockpit. "Oh, no," he moaned. The windshield was caked solid with ice. He couldn't see out. He knew it then. We're going to crash, he thought. We're actually going to lose this airplane. A feeling of strangeness came over him, as though reality had suddenly become a dream. Things now seemed oddly remote, but very clear. He tried to shake the feeling, but it persisted as he turned his attention back to his crippled aircraft.

A pilot training warning filled his mind, something about the worst altitude to penetrate a thunderstorm. Pushing forward on the throttles, ignoring the possibility of a flameout, he fought to inch the nose into a climb attitude. "We've got to climb—it's our only chance," he whispered.

"Mayday, Mayday! MAC 321 is climbing and squawking emergency," Hawk managed to call.

"Roger, 321, hang on and ride it out. You can make it to Dover," a calm voice answered. It had a strange sound, as though Hawk had heard it with his mind rather than his ears.

Hawk clenched his teeth. Straining at the yoke, he somehow got the lurching aircraft into a climb.

"Ten thousand fuel," Hobo called out weakly.

Hawk glanced around at the strange sound of his voice. The cockpit was a wreck, strewn with equipment and litter. Hobo, ashen-faced, lay against the panel, blood dripping slowly from a smashed lip.

Hawk felt dizzy and nauseated. Dear God, he thought, I've hurt a lot of people. Please let me get them home.

"MAC 54321, if you're under control, turn right to zero one zero, vectors to Dover."

Hawk noticed the ice starting to break away. They were passing 18,000, when the turbulence suddenly subsided. "Roger," he radioed, "and we're emergency fuel."

Minutes later the wounded 141 bumped down the rain-lashed final. The controller had given them an excellent vector to the runway, without a frequency change. The approach lights gleamed through the rain.

"Alan," Hawk spoke carefully to his pale, blood-spattered copilot, "the wind is out of limits so whatever you do, don't let go of the aileron; keep it full into the wind until we're stopped."

Alan nodded weakly.

The Starlifter slammed heavily onto the runway. Hawk banged the nose gear down immediately. He jumped on the brakes and cursed the spoilers for not working. "Your aileron, copilot," he yelled as he grabbed the nosewheel steering.

Fighting to control the skidding aircraft, Hawk turned the nosewheel with no effect. Desperately he snatched in full downwind engine reverse. The aircraft, careening dangerously close to the runway's edge, snapped suddenly straight.

"We got it made!" Hawk

yelled. For no reason, Alan released the aileron. The wind whipped the aircraft instantly sideways, skipping the nosewheel violently. Too late, Hawk jammed in full aileron as he cried out, "No!"

The main gear tore into the dirt, spinning the aircraft around and spraying mud wildly. Then it was over.

•

The General climbed slowly onto the aircraft. His eyes went slowly over the inflated life rafts, scattered tiedown chains, and the blue latrine fluid which seemed to cover everything. Hawk, watching, was startled to see four stars on each shoulder. The sense of unreality which had been with him ever since the storm had seized the aircraft grew stronger now. The general's face seemed familiar, like a memory of a textbook photo; but his uniform seemed wrong somehow, sort of old-fashioned . . . Hawk shook his head in a vain attempt to clear the haze from his senses.

"Sir," he weakly began, "I just didn't know it was there and—"

The General cut Hawk off with a raised hand, then placed it on Hawk's shoulder. "Sometimes these things happen, son. You've been through enough, judging from the looks of this airplane, so just come on now." His voice was gentle, comforting, but sad.

Hawk looked up at the General. "Sir, I just would like to go home first and get some rest. I'm okay, just beat and scared."

The General nodded.

•

Ring!

Hawk quickly sat up in bed. Darkness. The ringing continued. The phone, he thought. I've got to answer the phone. Groping, he found the lamp, realizing he was in his own bed. Shaking his head, he missed his wife. Her side of the bed was undisturbed.

Ring! Stumbling to his feet, he staggered toward the dresser for the phone. He felt confused. His body hurt and he was dizzy, but, strangely, rested.

Standing at the dresser, he looked at himself in the mirror. His naked body was bruised where the harness had dug into him. It must have happened, he thought.

Ring! Hawk picked up the phone.

A voice was already speaking. "That's right, General. They've just finished analyzing the flight recorder and radar tapes. They turned west to 300 degrees over Norfolk, which we verified from the radar tape as being at exactly 2350 Zulu."

Hawk's mouth dropped open.

"Nine minutes and 45 seconds later, the flight recorder registers the lightning strike. Five seconds later, at 2359Z and 50 seconds, the flight recorder shows a negative six-G shock. The aircraft disappeared from the radar tape at 2400 Zulu so that's probably when the wings were torn off."

Hawk flushed. "No . . . no!" he stammered. He looked quickly at his Glycine. The second hand suddenly started running . . . 2359 Zulu and 54 seconds . . . 55 seconds . . .

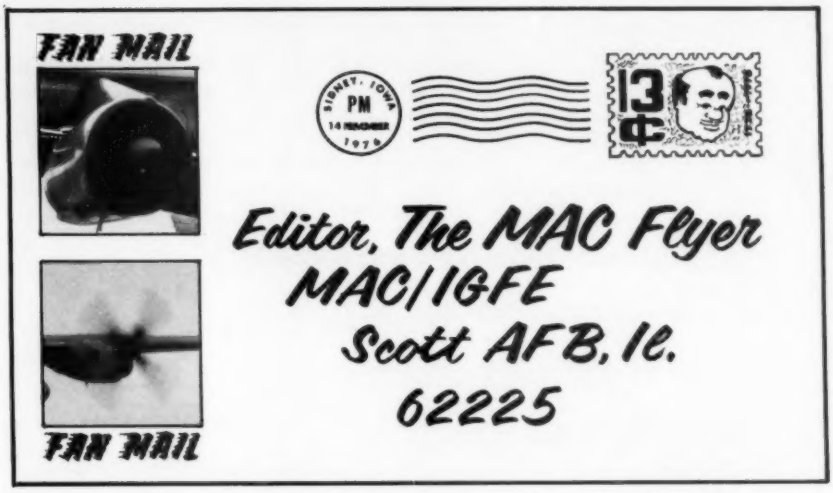
Wild-eyed, Hawk looked at his dimming reflection in the mirror. "Dear God," he whispered, "I'm fading."

The phone slipped from his grasp and he clutched frantically at the dresser for support. His mind whirled and he felt terribly dizzy.

Jerking his watch closer, he stared at the second hand . . . 58 seconds . . . 59 seconds . . .

ABOUT THE AUTHOR

Captain Duke is an Air Force Reservist serving with the 300 MAS (Assoc) at Charleston AFB, South Carolina. He is a distinguished graduate from UPT, and has been a C-141 instructor pilot as well as select lead-qualified. Captain Duke was the standardization pilot (EC-47) for the 366 TFW at Danang AB, Republic of Vietnam. When not acting as an aircraft commander on a Charleston-based 141, Captain Duke works for the Department of the Army at Hunter AAF, Georgia.



FAN MAIL

Feigned Rain

In the August issue of THE MAC FLYER you had an article entitled "Weather Report." The text was accurate enough, but the picture captioned "Rain" actually shows a classic example of mountain wave type clouds with an underlying dust storm in the Owens Valley of California.

Having worked in weather for the last ten years, I appreciate your articles about weather and its effects on aircraft.

SSgt Benjamin V. Noah
Det 2, 1 Weather Wing
Andersen AFB, Guam

Reference your August 1976 issue, "Weather Report," page 10. The picture appearing on that page labeled "Rain" is, in fact, not rain.

Attached is a copy of the picture and the words that go with it. "Turbulence" would have been a better title.

Capt Kenneth Y. Nozaki
USAF Environmental Technical
Applications Center
Scott AFB, Illinois

The Owens Valley . . . is dry in March in the lee of the Sierra Nevada of which Mt. Whitney is the highest peak (14,495 feet) as seen on the right. After the descent of around 9,000 feet the strong wind blows up dust from the valley floor and this is carried up to around 18,000 feet where there is a cloud in the first lee wave above the rotor. The rotor is filled with dusty air circulating in it.

★ Sorry about that. The TMF staff has been advised to "dust" off their old weather manuals. Thanks for the correction.

The Owens Valley

C. R. Terror: Antihero

A couple of words on "C. R." (1) I have detected a change in artist recently, but may have overlooked any words concerning the change, such as kudos for the outgoing illustrator, who the new illustrator is, etc. (2) I was not impressed with the Bicentennial episode of C. R. It would have been better to give C. R. a break (from his own flaws) on this happy occasion. I realize negligent and flagrant accidents do not take any sort of holiday, but I seem to recall that the precedent was set in a Christmas episode a few years back in which C. R., if he didn't do anything particularly right, at least did no wrong (a refreshing change of pace, I might add). C. R. was reminiscing of adventure on a tropical isle when primitive natives shot three arrows into the MATS glove symbol on his C-124, which he claimed with his usual humility to have been the origin of the arrows depicted on the current MAC emblem.

Maj John C. Reimer, Commander
Det 11, 24 WS
Reese AFB, Texas

★ You must have missed a few issues, John. We said goodbye to TSgt Eugene Reece in a March 1976 "Global Note" and welcomed Mr. Brian Gauss in a June "Note." Concerning the antics of our Ambient Aeronaut, it should be apparent that few people exercise any control over C. R.'s behavior. As Long Suffering Sam says, his Bulgy Boss exhibits all the bad points of all the good pilots. However, if you caught our September issue, you'll note that C. R. was too busy keeping a substitute co-pilot out of harm's way to pursue his own pleasures.

One "Good on Ya"

I've been reading THE MAC FLYER for years—even benefiting from every issue—and haven't written a jot, or for that matter a tittle either, to say "Good Show." But even a "Weather Weenie" has to stand proud for the superb job (cover to cover) in the Bicentennial issue. Thus, happy "Sierra Hotel!" to you and all the staff—and best wishes for the next 200!

Col Gerald D. McCright,
Commander
12th Weather Squadron
Ent AFB, Colorado

★ Thank you, Sir. We all enjoyed your good words. We did get a lot of help from our readers in the form of photos, stories, etc., so they should get a piece of the glory. We thank you.

Break Right Here Left

It has been almost 12 years since I turned in my green flying suit for a gray flannel business suit. Prior to that I had accumulated over 3,600 hours as a USAF pilot. Most of that was as a C-124 jock, with a good deal of time in single-engine jets as well as the T-37. Unless my tired old eyes are deceiving me, I think I caught a boo-boo in your story, "Return to Tweety," in the May 1976 issue of THE MAC FLYER.

The article starts: "Roger, Colt 59, you're cleared three sixty overhead for landing runway two-two *right*. Report break." Later it says: " . . . he'll be breaking *left* . . . ."

If memory serves me correctly it would be highly unlikely that, with parallel runways, an aircraft would be cleared for a left break on the right-hand runway. Am I right or wrong?

P.S. I still get a kick out of reading your publication. A lot of the equipment has changed, but basically it's the same type of person doing the same type of job, and it's a lot of fun for me to still be able to identify with it, thanks to you.

John S. Rees
77 Seventh Avenue
New York, New York

★ Mr. Rees is correct. It is highly unlikely that you'd get a *left* break landing on a *right* runway. Thanks for the correction and kind words.

All in the Family

I'm sending you a photo from the MATS past. Purely by chance, my father and I were assigned to the same unit—20 years apart!

The 6th TCS was at Tachikawa and is now the 6th MAS at McGuire, which was my station before my present assignment.

Capt Wally Doiron
728 MAS (Assoc)
Norton AFB, California

★ Check the name of the crew chief on the C-54 and you'll see what the Captain means. Our thanks to the Doirons for the interesting miniphoto-story.

Gunbarrel Vision

I would like to express my dissatisfaction with the photo on the back cover of THE MAC FLYER (August 1976). Although I thoroughly enjoy most of the "Touch 'n Go" episodes, this photograph is in violation of all the safety rules I have learned pertaining to firearms. Even though this photo was taken in jest, the seriousness of this act cannot be overlooked. If "MAC" and "Safety" are to be synonomous, we must assure everyone that even when jesting, safety must not be overlooked.

SMSgt Max L. McDaniel
76th Mobile Aerial Port Squadron
Rickenbacker AFB, Ohio

★ We, too, hope that the photo was "posed" or the camerman is in a heap of trouble. We further assume that, based on good safety practices, the camera was remotely operated or a delayed shutter device was used to snap the picture. But, you're right—guns are not toys and should not be treated as such.

Portrayal of Women, Again

Man thinking of woman—offensive? Since when?

It is encouraging that we still have a place in man's mind after some of the antics that females have performed in the last few years. The idea that man still "thinks" about woman is indeed super—some of us still enjoy being "woman."

I really enjoy your magazine, especially the cartoons.

TSgt Ruth E. Rich, USAFR
908 TAG
Maxwell AFB, Alabama

★ Note to the readers: Sgt Rich is responding to a letter which appeared in the June FLYER, condemning TMF's treatment and portrayal of women. Thank you, Sergeant Rich, for those words of encouragement. We received some other favorable responses but the wording was a bit terse for the sensitive eyes and ears of the typical MAC crewmember.

Kudos For The Maharishi

Being a Transcendental Meditator, I thoroughly enjoyed your article on "The Maharishi Beam Bogie" in the September TMF. Transcontinental Meditation should definitely be practiced by all aircrewmembers. But for an even safer mission I would suggest Transcendental Meditation before flights and Transcontinental Meditation during flights. TM can be used very effectively to fight fatigue and to increase concentration, two main factors in flight safety.

Capt James A. McEvoy
18 MAS
McGuire AFB, New Jersey

★ Glad you enjoyed the article. We've

passed your words on to the author. Keep reading TMF and don't get caught with your mantra down.

The editors welcome letters from all readers, both military and civilian. Letters should be addressed to:

Editor, THE MAC FLYER
MAC/IGFE
Scott AFB IL 62225

Letters should be signed. At the author's request, names will be withheld. Letters may be controversial in nature but should be written in good taste and address specific issues rather than personalities. The editors reserve the right to print each letter in whole or in part.

Say Again?

"I think he's a navigator. . . he's always wanting more latitude!"

From *The Journal of Air Traffic Control*

Free! Free! Free!

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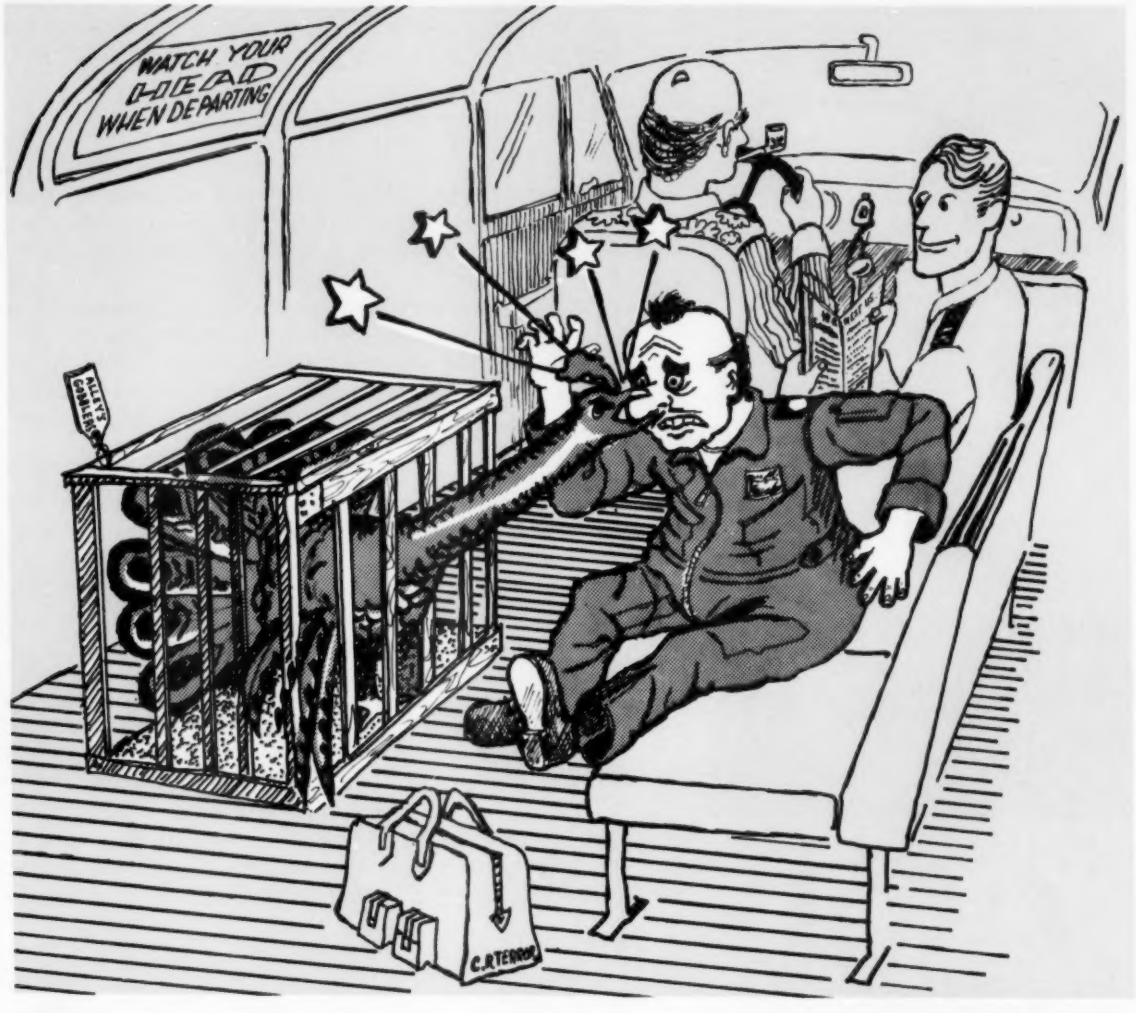
Hurry—contest ends 31 March 1977.

C.R. TERROR



As the Aviator with Avoirdupois stared intently out the window of the crew bus at the passing countryside, a road sign caught his eye. Quickly, he referred to the highway map spread out across his knees. His lips moved silently for a moment; then his face illuminated with delight.

"Aha! There it is, my man, Route 781A. Turn right here."

"Ain't no use goin' right," the disgruntled driver cut in. "Road dead ends 'bout half a mile down."

C. R.'s look of triumph faded. He stared at the map intently for a moment, then swapped it end for end. The look of satisfaction returned.

"As I was about to say before you so rudely interrupted, my good man, just turn right here

A Turkey in a Herky is no picnic. C. R.'s quest for the best leads the Crafty Chrome-dome's crew off the beaten path to some Thanksgiving misgivings.

left, follow your protuberant proboscis, and we'll be there in a few furlongs."

The crew bus driver threw the Rotund One a surly look, ejected a healthy slug of tobacco juice through the open window, and slammed the careening vehicle into an expert four-wheel drift. As they straightened out onto an even smaller country road, Long Suffering Sam picked his Bulgy Boss up off the floor, dusted him off, and handed the road map back. Sam's brow was furrowed with concern.

"Sir, do you really think we ought to be doing this? The mission schedule says two hours ground time at Dogpatch, and we've been gone almost an hour already."

"Never fear, m'lad," C. R. reassured. "As you well know, MAC's Finest never misses a block time. Besides, this mission is vital to the morale of the troops, and—" He broke off suddenly, staring outside again. "Driver! Halt the machine! We have arrived! WHOOAA!"

The bus jolted to a stop in front of a spacious farm occupied by numerous long, low buildings. A large sign at the entrance to the driveway proclaimed, "Alley's Gobblers—the World's Finest. B. C. Alley, Prop."

Sam's eyes widened. "Boss—a *turkey farm??*"

"The best in the business, m'boy," the Rotund One replied merrily. "And just the place for an experienced world traveler such as myself to obtain his Thanksgiving dinner for a mere pittance. Why, once you've sampled my Turkey a la Terror with nectar and ambrosia dressing, you'll—"

The Galumphing Gourmet's gastronomical dissertation was cut short by the arrival of the proprietor, a rather sly-looking individual in overalls with a corncob pipe clamped in his teeth. The teeth, Sammy noted, were expertly capped and glistened in the sunlight; the corncob was actually a carefully hand-carved Turkish Meerschaum, and the overalls had a Brooks Brothers label. Sam thought it best not to mention any of these things.

The negotiations were concluded swiftly, and the Terrorific Twosome were on their way back to Dogpatch AFB and their waiting C-130. C. R. was proudly admiring his new acquisition, which in turn was regarding the Paunchus Pilot through the bars of its wooden cage. It was, Sam thought, not your average turkey. It was sinewy and muscular rather than plump. Its beak and spurs were sharp as an eagle's and its eyes gleamed with malevolent intelligence. Well, Sam shrugged mentally, the boss seemed to be happy with the beast; and besides, it had only cost him five bucks and a "ticket" for a reserved seat at the next Thunderbirds' demonstra-

tion (one of C. R.'s favorite ploys).

Unfortunately, the feisty fowl didn't seem to share the Master Manipulator's admiration. As C. R. leaned closer to the cage, estimating the proportion of light and dark meat, a long neck shot out. A sharp beak snapped shut. Screams and a muffled gobbling filled the air.

"AAAaarrrgh! Sammy! Help! Ged hib off! He'd got by node!" C. R. wailed in anguish. There was a short but sharp struggle, and soon the Round One was quietly sitting and nursing an olfactory organ which was already somewhat larger and redder than normal. There was no conversation for the rest of the trip; only the suppressed snickers of the bus driver and a quiet chuckling sound from the cage broke the silence.

"Dogpatch Tower, Wishbone 36 is ready for departure." As promised, the Celeritous Skipper of Checklists had short cut his way through preflight, engine start and taxi, and now the Herky was in the Number One position with a full two minutes to spare.

"Wishbone 36, expect five minute delay for ATC release."

C. R.'s chubby fingers mashed down on the mike switch. "Ah, rog, Tower, 36'll take off Vee F 'n R and pick up our clearance airborne."

"Roger, Wishbone 36. Contact departure, monitor guard. You're cleared for takeoff; maintain VFR."

"But, Sir—" Sammy began to protest.

"M'boy," C. R. interrupted, "You're forgetting the MAC motto: On Time or Else." He firewalled the throttles, and in moments the powerful Hercules was screaming skyward. "Besides," he added as Sammy raised the gear and finished the before-takeoff checklist, "I thought I'd show my appreciation for a good deal by giving Mr. Alley a little personal air show." He leveled the hurtling Herky at 500 feet and turned east, searching for State Route 781A.

Meanwhile, back at the ranch, the turkey magnate had safely locked away C. R.'s five-dollar bill and was contemplating how large a markup he should use when he resold the fake Thunderbirds ticket to the Widows' and Orphans' Home. He was considering printing more tickets when a thundering, whistling roar assaulted his ears. Shelves shook their contents onto the floor; windows fell out of their frames. Pandemonium broke loose in the turkey runs as the panicky birds, trying to flee the horrible sound, piled up by the hundreds, smothering those on the bottom.

Alley rushed outside just in time to see a huge aircraft zooming upward in a graceful chandelle. He watched as it roared by again, blasting leaves off the treetops with its wake.

The years had given the turkey rancher sharp eyes, a quick wit, and a good memory for numbers. He wrote down a few figures on a pad from his pocket and rushed inside to the phone.

•

"Help! For Pete's sake, somebody help!" The excited voice of Sergeant Ty Downs rang out over the interphone.

C. R. had just pulled up from the second low pass and was busily exchanging a lot of airspeed for a lot of altitude. "Sammy, go see what's wrong back there. I'll pick up the IFR clearance and take it up to 25,000."

"Yes, Sir," Sammy acknowledged. He unstrapped and headed for the cargo compartment.

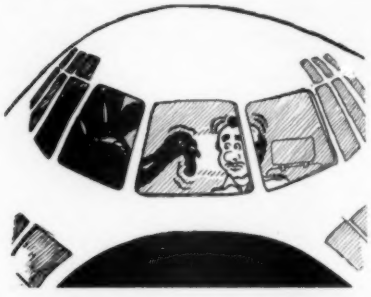
A few minutes later he was back, excited and a little scared. "Sir, it's your turkey. The cage must have broken on one of those pullups, and he's loose. He's chasing Sergeant Downs around the cargo pallet and it looks like he's gaining."

"What!!?" the Outraged Aeronaut bellowed. *"My turkey*!!? Get down there and catch him! He'll run off ten pounds before we get him back! *And don't hurt him!*"

"Uh, yes, Sir," Sam gulped. He reluctantly made his way back to join the fray.

C. R. listened anxiously to the sounds of battle as he leveled the airplane off at FL 250. Finally there was a loud thump, two yells of pain, and in an instant the cockpit was full of flying feathers and fighting mad turkey.

One healthy peck on the third cervical vertebra was enough to convince Sergeant Torque, who immediately dived for cover under the navigator's panel. The furious fowl leaped into the copilot's seat and turned a baleful glare on the Field-Grade Fumbler, who sat paralyzed in awe.



Not satisfied with his perch on the right seat, the battling bird looked for something more to his taste and found it: the gear handle. It snapped downward instantly under his thirty pounds of weight. There was a roar, an agonized cry from the Addled Aeronaut, and a groan of protesting metal as the gear doors ripped away and floated gently to earth. C. R. lunged, but it was too late, and his seat belt brought him up short. His grasping hand caught only the number one condition lever. The Herk yawed violently to the left as number one went promptly into feather.

Now the Portly Pilot's semi-supine position presented an irresistible target to the World's Baddest Bird, who enthusiastically dug his claws into an inviting shoulder and began to perform an excellent woodpecker imitation on the Bald One's shining dome. C. R., nearly berserk, fought back frantically, clutching at anything within reach. One of those things, unfortunately, was the emergency depressurization handle. There was a deafening blast of wind and a flurry of feathers. The Great One, temporarily free from his avian adversary, scrambled frantically for his oxygen mask—and realized too late that it was securely stowed downstairs in his flight bag. He was almost out of his seat when the world faded gently into blackness.

•

The Terror of the Airways came back to the present to find himself in the right seat. Sammy was taxiing the airplane smoothly into the chocks, where an impressive array of staff cars awaited.

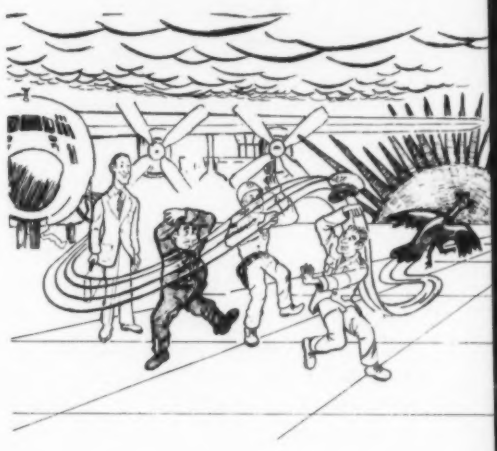
"Sammy? Wha—uh, where am I? Where's that blasted bird?" He glanced around the cockpit fearfully.

"Dunno, Boss. When I got upstairs, you were both draped over the console, out cold. I put you in the right seat and him in the back."

"Well, never mind. We've got enough to worry about, by the looks of that reception committee."

The engines were shut down, and the Captain of Curious Capers reluctantly opened the door to face the scowls of the DO, a JAG officer, and what appeared to be a civilian attorney.

"Uh, good afternoon, Sir—aauuughh! ! !" C. R.'s newborn apology was cut short as his intended dinner, now fully recovered from his hypoxia, spotted an escape route and took it. He delivered a final peck at the Round One's cranium as he departed, fired a parting shot of a different sort at the DO, and raced off across the ramp into the sunset.



Some time later, the Round One stood glumly by his aircraft, holding a bill for $1,843.65 worth of turkeys. The DO was still trying to clean his hat as he got back into his staff car.

"Sorry, Boss," Sammy comforted. "But don't let it spoil your Thanksgiving; you can come over and have dinner with us."

"Thanks, Sammy," C. R. replied glumly. "I guess I'll have to take you up on that." Suddenly an expression of horror spread over his chubby countenance. "Sammy—you wouldn't—I mean—"

"Oh, no, Sir, nothing like that," soothed Sam. "It's okay. We're having ham."

Quick Stoppers

Gimme a Bigger Wrench

A fire warning light on the number two engine prompted a T-39 crew to bring their bird back for an emergency return to an en route station. The light went out when the throttle was retarded to idle; the landing was uneventful, and the engine was shut down on landing roll.

Transient maintenance troops found a fuel line chafing against the fire detection loop. They removed and replaced the fuel line, and the minijet returned to home station. Just a routine repair job so far; but as the Sabreliner taxied out for its next flight, a fuel leak was noted on the number two engine. Investigators found that the fuel line which had just been replaced had ruptured beneath an overtorqued B-nut.

What's that old saying about the cure being worse than the disease?

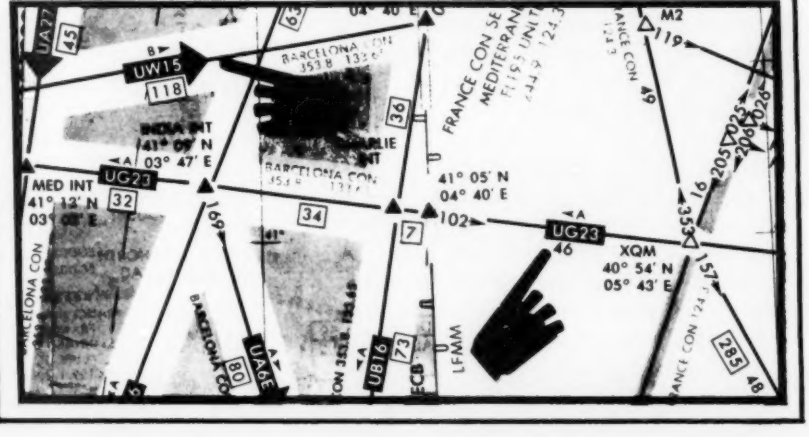
"A" Routes and Altitude Separation

There seems to be a bit of misunderstanding concerning altitude separation on converging airways. A Serious Safety Hazard Report submitted by a MAC crew suggests problems in this area—particularly when flying continental Europe.

The crew submitted the report when a commercial jet at their altitude had to descend 1,000 feet to avoid a midair with the MAC types. Their courses converged at nearly 90 degrees and both were assigned the same altitude.

But the wording of the report suggests that the crew thought a hazard existed because both airways were "A" routes and, therefore, it was possible for aircraft to be assigned the same altitude along the converging routes.

While the possibility is there, the crew's rationale for being assigned the same altitude is wrong. The report's reference to "A" *routes* is in error. The "A" with accompanying arrow only indicates an "A" *altitude* (FL 270, 290, 330, etc., in this case). And aircraft flying in the opposite direction of the arrow fly "B" altitude (FL 260, 280, 310, etc.) on the same airway. The fact is that the only time you'll see a "B" altitude arrow is on one-way routes. This means that any time you cross an airway with two-way traffic there's a possibility of converging traffic at your altitude. The lesson is that any time you cross an airway be on the lookout for traffic—especially in those parts of the world that don't have sophisticated air traffic control radar.



World Traveler or Space Traveler, Ya Gotta Clear Customs

You know, of course, wherever foreign travels may take Americans, they must clear U.S. Customs on the return home, right?

A news release from the U.S. Customs Service listing historical events of past Aprils noted that in 1972 the Apollo-16 astronauts were required by law to obtain clearance on whatever they brought back from their three-day stay on the moon.

The astronauts were cleared by Customs due to the law Section 1582 of Title 19, which required the astronauts to make a customs declaration, just like other travelers. Apollo-16 commander Young had to fill out a manifest (moon rocks) and an entry form. How about that?

——Howard Levy
in *Cross Country News*

Wonder what the duty is on "green cheese?"

You Vill Fly Safe!

The four-man crew of an East German Interflug Tu-134 has been sentenced to prison for allegedly contributing to the death of 24 people when their plane crashed at Leipzig, East Germany, in September 1975.

The captain received five years while the copilot, navigator, and radio operator were each sentenced to three years.

The accident occurred when the aircraft dropped below the glide slope and struck a radio tower.

—*Air Line Pilot,* July 1976

Hurricane Albert

The big jumbo made an en route stop at a northwestern civilian field to pick up a couple of tech reps and about 39,000 pounds of cargo. No problem—the aircraft was loaded and prepared for departure without incident. Prior to taxi, the scanner was stationed in the number one hatch to keep an eye on the big bird's reach. All set. The copilot called ground, announced that they would be starting engines, and asked for preliminary taxi instructions.

Ground advised that the Galaxy would taxi to the runway via the taxiway off their right wing. Minutes later, the MAC crew requested taxi clearance and was told to hold while several light airplanes taxied by them. Shortly, the jumbo was cleared to taxi; the left-seater advanced the throttles, and got the beast rolling. The aircraft was fairly light and required little more than idle power to get things moving. Once the initial inertia was overcome, the driver reduced power and a gentle right turn was started. About 45 degrees into the turn, the crew noticed a light plane approaching on another taxiway and stopped to allow the wee bird to clear. Again the pilot added power and headed for what he thought was the correct taxiway. "Not that one," ground advised and directed the Galaxy crew to continue the right turn for another 90 to 100 degrees. As the left-seater started a shorter radius turn, he brought the power up on numbers one and two General Electrics.

About 60 degrees through the turn, the pilot reduced power after being advised by the scanner and ground that the *jet blast had overturned a light aircraft.* Yup, two light aircraft sans tiedowns were blown about as the stacks on the GE's took aim on them during the turn.

A Cessna 150 lay unoccupied and inverted on the ramp. Behind that craft was a Stagger-Wing Beech that escaped class 26'ing only because two would-be mechanics became anchors and restrained the classic.

Regardless of what fixed-wing you fly (unless you're in the Schweizer class), you leave a wake when you're taxiing around, so keep an eye out for the little guys.

QS

CPI vs 44 Magnum

A red light in the cockpit of the C-130 alerted the crew that the aircraft's CPI had deployed. The familiar beeping tone on Guard confirmed the nagging red light.

Although the pilot reported the CPI deployment over the Gulf of Mexico, the instrument fluttered inland to come to rest on Texas soil and other pilots began reporting its persistent tone to the RCC in New Orleans.

The Coast Guard Rescue Control Center directed the launch of an HU-16 Albatross to investigate the distress signal. The Coast Guard crew homed in on the noisy nuisance and directed the local sheriff to the field where the CPI had landed.

The sheriff found the CPI; the HU-16 pilot reported that the distress signal was still crying "wolf." But try as he might, the sheriff couldn't silence the CPI, so . . . he decided to try the same method used against rattlesnakes and other noisy varmints. He drew out his revolver and fired. The CPI was silenced forever. The search and rescue incident file was closed.

Lt Col Pete Samett in *Rescue Review*

Lame Sabreliner

The MAC minijet was transiting a civilian airdome. No fuel was taken on and the winds on takeoff were calm. It appeared to be one of those "ops normal" departures as the teeny weenie taxied out and onto the active. The pilot and copilot had no problems—well, not until the T-39 reached about 90 knots on takeoff roll. At this point, the Sabreliner seemed to develop a mind of its own and made a turn for the sea oats on the right side of the runway. Both pilots worked at getting the craft straightened out, but full left aileron and rudder would not do the job. Fortunately, as the aircraft approached the right side of the runway (at a 30-degree angle), the pilot found enough airspeed to get the boondocks-bound bird airborne.

The crew, wisely electing not to raise the gear, executed a Conference Skyhook. Skyhook wizards could not come up with a definite cause and an uneventful recovery was made at a nearby Air Force base. Here's what investigators found:

Wing fuel tanks appeared to be within the prescribed 200 pounds, but the right nose gear and right main gear tire were 20 PSI lower than desired.

Several days later, maintenance troops discovered that when the wing fuel tank's gauges indicated a balanced condition, the right wing tank actually had 150 pounds more fuel than the left tank. Though investigators could give no positive explanation for the incident, they felt that the combination of low tire pressure and an unknown fuel imbalance (all on the right side) caused the aircraft to veer starboard.

after deadline . . . .

RUNWAY FOAMING IS BEING DISCONTINUED at naval air stations. Air Force wizards are looking into the Navy's finding that runway foaming is a waste of time and money. In the meantime, if you have an emergency situation which requires runway foaming and you're headed for an NAS, best refile for a USAF-operated facility and request the fire suppression foam.

A NEAR-MISS occurred between a MAC C-5 and a commercial DC-9--this time over Japan. The incident was the result of late handoff between controlling agencies. Similar call signs contributed to the confusion. Recommendations: (1) aircrews should be reminded that Tokyo is a high density traffic area and (2) aircrews should verify any suspected erroneous transmission, especially in non-English-speaking countries.

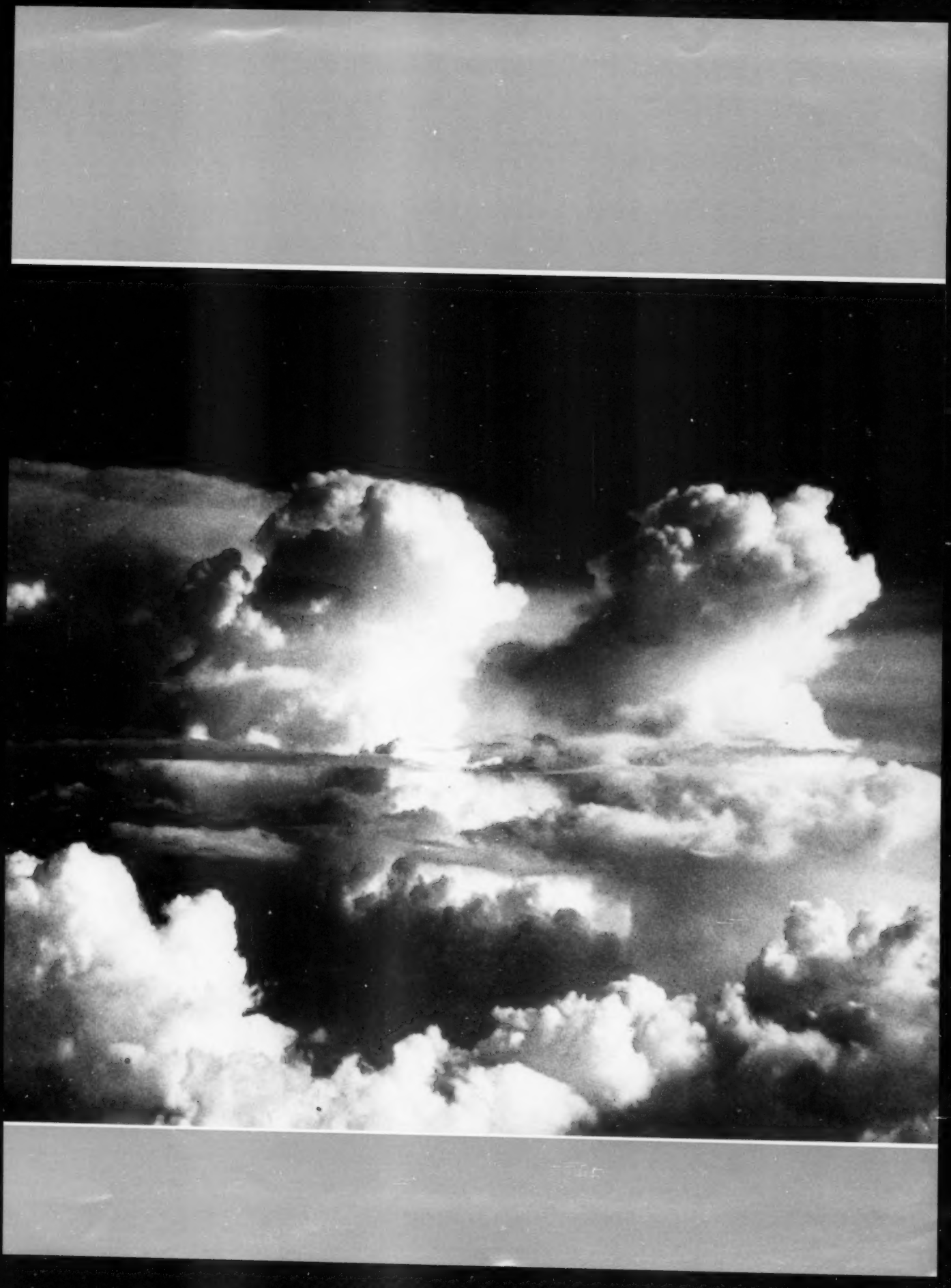
TWO MAC CREWMEMBERS suffered from the effects of hypoxia and/or bends on a recent MAC mission. It seems that the pilots observed a "door open" warning on the annunciator panel and the troops verified an "unlocked pressure door" indication in the rear.

Efforts to obtain a safe indication with pressurization normal proved futile so . . . the crew went on oxygen and depressurized. The cabin altitude remained at 25,000 feet for approximately 45 minutes while a loadmaster and engineer worked in the back to correct the situation. The duo used the walkaround bottles which provided some mobility but occasionally removed their masks to move about. A short time later both complained of symptoms thought to be decompression sickness. More on this in the January issue.

IN THE DECEMBER ISSUE:

"Christmas in the Rockies" might sound like a wonderful vacation but only under the right conditions.

They finally got Captain O'Keefe fully qualified--or did they? Read "Is Danny O'Keefe Qualified . . . Yet?"

"Super Troop" could be your next door neighbor. A tale of pressure, duty, and commitment--don't miss it.

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